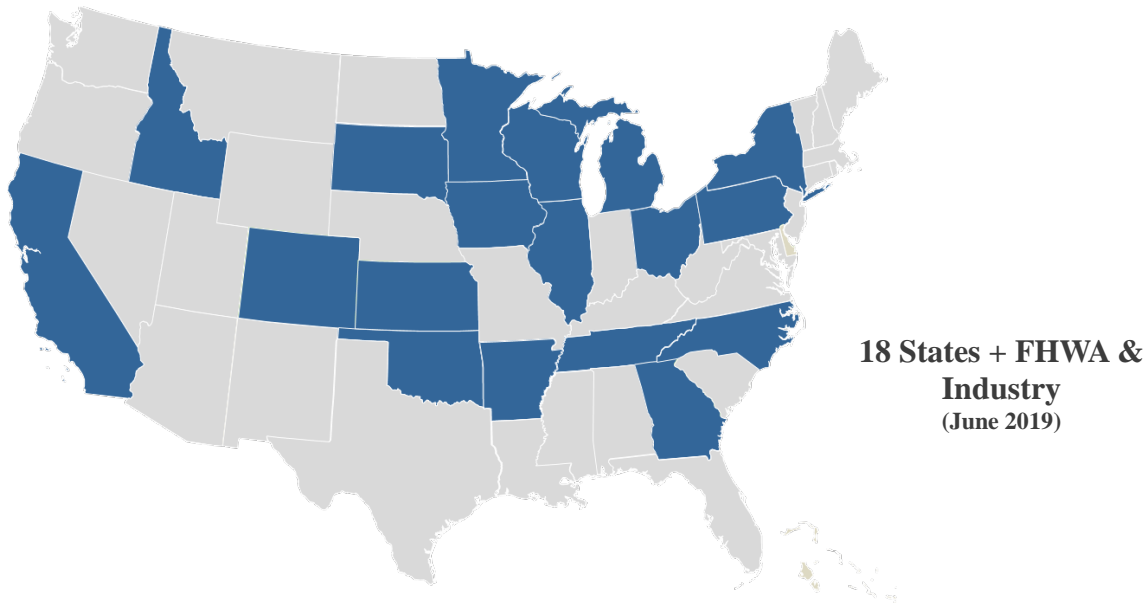


Performance Engineered Mixtures (PEM)  
Delivering Concrete to Survive the Environment  
June, 2019

## PEM Headlines

Georgia recently joined the [Performance Engineered Mixtures \(PEM\)](#) Pooled Fund as the 18<sup>th</sup> state to commit to the development and implementation of PEM.



## Completed Shadow Projects

The FHWA Mobile Concrete Technology Center (MCTC) visited a PEM shadow project North Carolina during May 6-17. As an effort to expose concrete industry professionals to PEM, an open house was held in Salisbury on May 15, 2019. Presentations were made by the CP Tech Center, FHWA, University of North Carolina, as well as the Contractor and State Agency representatives. The event was organized by the American Concrete Paving Association (ACPA) Southeast Chapter and the North Carolina Department of Transportation. The project for the event was the I-85 Widening and Improvements in Rowan County under contract by Lane Construction. The event was attended by over 60 people representing the DOT, Academia and Industry.

Members of FHWA and the CP Tech Center demonstrated the V-Kelly test, Box test, Super Air Meter (SAM) and the surface resistivity test at the project batch plant site.

## Upcoming Shadow Projects

The following additional projects in 2019 include:

- Kansas: I-70 near Colby, FHWA MCTC visit (July 29-August 9). Open House in Topeka (mid-August)
- Idaho: I-84 between Mountain Home and Cold Springs currently under construction.
- Minnesota: Trunk Hwy 60 near St. James (June) & I-35W/Lake Street in Minneapolis (July & August)
- Illinois: I-74 in Moline (July & August)

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### **FHWA Incentive Funds**

FHWA is considering a follow up to the very successful Performance Engineered Mixtures (PEM) Implementation Incentive Program with a second round of funds being made available to states who want to gain field experience with PEM technologies and practices. In the past year, FHWA has provided a total of \$800,000 to 9 states as they evaluate new tests in their quality assurance process and also to work with contractors on their quality control programs. The reports from these states will be shared with the TAC as they become available; FHWA will be using the results of these field projects to help guide future activities.

Based on the success of the program, and in response to a request from states, FHWA is considering making additional funding available to further support states gaining field experience with PEM. Details of the eligibility criteria are still being worked out. Mike Praul will be discussing this at the states-only meeting at the Fall NCC meeting.

### **Shadow Test Field Report**

Iowa Department of Transportation recently completed its final report of the shadow project conducted in 2018. The report includes results of different PEM tests performed by the DOT on US-20. Details of the FHWA MCTC visit in the summer of 2018 as well as the contractor's perspective and agency's perspective about PEM tests are also highlighted. The report is available on the PEM website [here](#).

### **Remember to Check Out the PEM Website**

The [PEM website](#) has been updated with new Surface Resistivity information from Oregon State University including

- [Formation Factor video](#) (this was shared at NCC in Denver)
- [Resistivity Template](#) (excel spreadsheet for download)
- [Resistivity Template Guidance](#)

### **Contact**

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For more information, please visit <http://www.cptechcenter.org/pem/>